

N73-30314

(E73-10975) PRECIPITATION PATTERN ON
ERTS-1 IMAGE (Kansas Univ. Center for
Research, Inc.) 3 p HC \$3.00 CSCL 04B

CENTER FOR RESEARCH, INC.

UNIVERSITY OF KANSAS

ERTS DETAILED IMAGE INTERPRETATION REPORT

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E73 10975
CR-133754

CRINC

DIIR No.

2264-8

Date

Prepared

April 10, 1973

Subject:

Precipitation Pattern on ERTS-1 Image

Subject Geographic

NASA Test

Coordinates 38-48 N/101-12 W

Site No. NA

Unclass
00975

G3/13

NASA Image Descriptors:

Report Summary:

A precipitation pattern in west central Kansas was detected on an MSS image acquired 22 September 1972. Good correspondence was found between the interpolated one-inch isohyet and the apparent precipitation boundary in the image.

Imagery References

CRINC	NASA Image
Image No.	ID Block

Subject Image	Coordinates
X	Y

Cloud	Cover
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Image	Quality
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MN 00112 E-1061-16564-5

NA NA

0%

Good

Original photography may be purchased from
EROS Data Center
10th and Dakota Avenue
Sioux Falls, SD 57198

Map References: USGS NJ 14-4, NJ 14-7, Scale 1:250,000

Digital Data Used Yes No X

Image

Analyst D. L. Williams, B. L. BarkerPrincipal Bonnie BarkerInvestigator S. A. Morain

Donald L. Williams
for S. A. Morain

NASA

Contract No. NAS 5 2822

User

ID No.

U664

MMC #060 IV

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ERTS DETAILED IMAGE INTERPRETATION REPORTCRINC
DIIR No. 2264-8
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Analysis of an MSS-5 image acquired over west central Kansas on 22 September 1972, revealed a northeastward trending pattern of anomalously dark base tone north of Garden City, Kansas. This pattern was hypothesized to be the result of precipitation. To verify this hypothesis, daily precipitation data from the weather stations in and around the pattern were tabulated for the preceding five days. Precipitation had been reported at all area stations on 20 and 21 September, with reported amounts ranging from 0.27 to 1.68 inches.

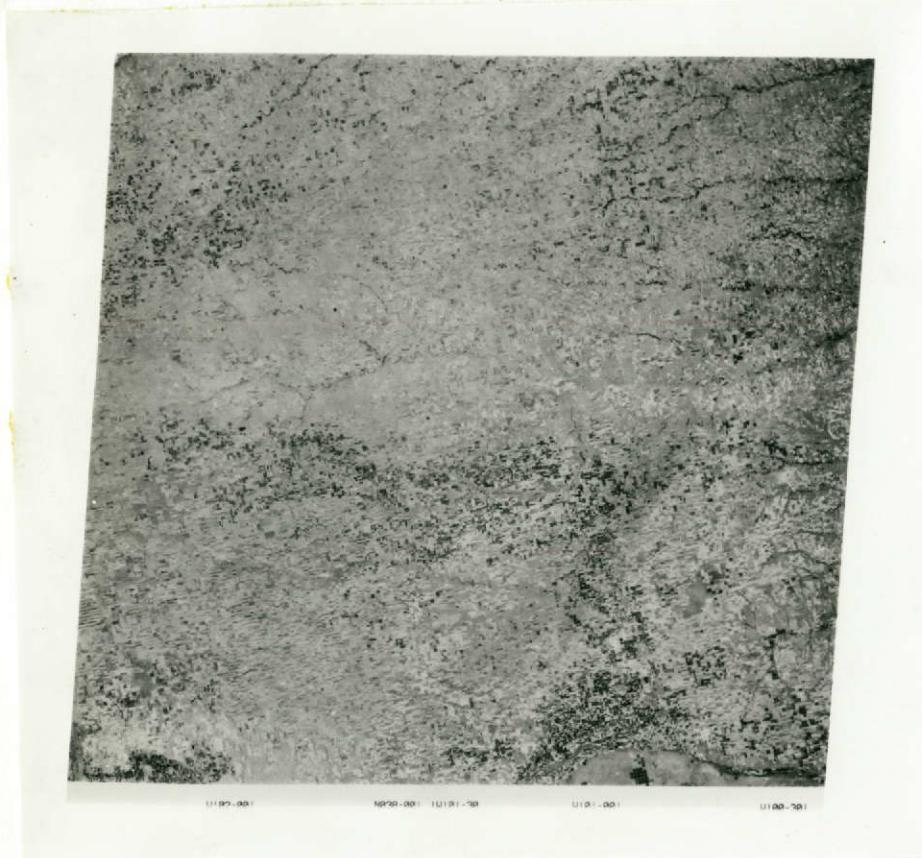
The weather stations were located on an enlargement of the image and the precipitation amounts were plotted. The one-inch isohyet was interpolated between these points. Close agreement was found between the isohyet and the edge of the darkened area, except for a small projection of the dark area in the southeastern part of the image.

The results indicate that detection of major precipitation events on MSS images is feasible and that the boundaries of these events may be determined more precisely than by conventional isolining techniques.

Image analysis and reporting required 2 manhours.

Reference

U.S. Department of Commerce, Climatological Data, Kansas, Vol. 86 (9)
September 1972.



PRECIPITATION TOTAL (IN INCHES),
SEPTEMBER 18-22, 1972

